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Cost Accounting in the Laundry Industry

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NATIONAL ASSOCIATION OF
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COST ACCOUNTING IN THE LAUNDRY INDUSTRY

The laundry industry, according to the 1914 census, occupied eighth place as to number of establishments and fourteenth place as to number of wage earners. The laundry industry has been extremely deficient in respect to both general and cost accounting, although it is an important and rapidly growing industry. While there are many laundries with investments ranging all the way from $100,000 to $1,000,000, too often the bank account is mistaken for the profit and loss account. Until seven years ago cost accounting was virtually unknown in this business, and the various classes of laundry service were rendered at prices whose relation to the cost of that service was absolutely incongruous. Indeed it was not in the least uncommon for a laundry to charge three cents for laundering a handkerchief and but one and a half cents for laundering a sheet. But the entire laundry industry has not been conducted in a hit-or-miss fashion. Due largely to the persistent efforts of the Secretary of the Laundryowners' National Association seven years ago, a general accounting system and a cost system providing costs for the four general classes of service[1] was devised and recommended by that Association. About three years later the cost system was amplified to provide costs for fifteen classes of service.[2]

General Accounting

The installation of a general accounting system usually reveals the existence of large and preventable waste. In some cases the productive labor cost is found to be too high; in others, too much fuel is being burned; in many cases the collection and delivery expenses are excessive; and generally an extravagant use of laundry supplies is detected. The cost of laundry supplies used should not exceed six per cent of the gross earnings but as a rule they do. In certain laundries they run above twelve per cent. In a majority of cases the general accounting system alone pays for the cost of its installation during the first month of its use.

The general accounting of a laundry is very simple. Since the laundry business is run on a weekly basis, all of its work must be finished each Saturday. Therefore there is neither a work in

[1]These classes are discussed on page 6.
[2]These classes are mentioned on page 17 of this article.

process nor a finished goods inventory to contend with. By dividing the year into eight periods of four weeks and four periods of five weeks, twelve profit and loss statements may be made without difficulty. The only inventory required is the inventory of laundry supplies and the effort necessary to prepare it is almost negligible in most laundries. A number of laundries issue supplies upon written requisitions only, and record them in a stock ledger which is controlled by a Store Room account in the general ledger. Where this practice is followed it is desirable, nevertheless, to verify the book inventory several times a year by taking a physical inventory.

The general accounting books best adapted for a laundry consist of a cash received book, a check register, an invoice register, a journal and the necessary ledgers. Quite a few laundries are using a combined cash book, journal and purchase register. There is, however, no especial merit in this combination. Bookkeepers frequently understand it but proprietors seldom do. Nevertheless, its use has gained some headway since upon first consideration it appears to be cheaper than the more complete, safe, and more readily audited books which it supplants.

The general accounting system controls the cost system. However, the former is as separate and as distinct from the latter as though the use of a cost system were not contemplated at all. Accountants are thus enabled to install the general accounting system first, and then, when this is working sufficiently satisfactorily, to return and install the cost system.

The following are the accounts of the general accounting system now used by the Laundryowners' National Association:

ASSETS

Current:

1 Petty Cash
2 Banks
3 Change Fund
5 Notes Receivable
6 Customers' Accounts
7 Personal Accounts
10 Store Room
11 Fuel
12 Feed and Stable Supplies

Fixed:

16 Land
17 Buildings
18 Machinery and Equipment
19 Delivery Equipment
20 Office Equipment

Miscellaneous:

26 Unexpired Insurance
27 Other Deferred Charges

LIABILITIES

Current:

32 Notes Payable
33 Trade Creditors
34 Drivers' Deposits
35 Accrued Labor
36 Accrued Taxes
37 Sundry Accrued Expenses
7 Personal Accounts

Reserves:

41 Depreciation Reserve
42 Bad Debt Reserve

Excess of Assets Over Liabilities:

45 Capital Stock
48 Surplus
50 Profit and Loss

OPERATING EXPENSES

51 Productive Labor
52 Soap
53 Miscellaneous Wash Room Supplies
54 Starch
55 Miscellaneous General Supplies
56 Paper and Twine
57 Boxes
58 Aprons, Coverings, Paddings, etc.
59 Water Softener Supplies
60 Gasoline—Dry Cleaning
61 Dry Cleaning Supplies
64 Water
65 Gas
66 Machinery and Equipment Repairs
67 Depreciation—Machinery and Equipment
68 Fire Insurance—Machinery and Equipment
69 Taxes—Machinery and Equipment
70 Rent
71 Building Repairs
72 Depreciation—Building
73 Taxes and Fire Insurance—Building
74 Light
75 Indirect Expense
76 Superintendence
77 Liability Insurance
78 Lost (Waiting) Time
79 Miscellaneous Plant Expense
80 Indirect Supplies
84 Fuel
85 Purchased Power
86 Wages and Commissions—Drivers
87 Commission—Agents
88 Stable Expense
89 Branch Office Expense
90 Express and Parcel Post
91 Sundry Agency Expenses
92 Sundry Towel Supply Expense
93 Auto Truck Expense
96 Executive Salaries
97 Office Salaries
98 Bad Debt Allowance
99 Office Expense
100 Advertising
101 Lost and Damaged Goods
102 Free Work
103 Stationery and Printing

EARNINGS

108 Gross Earnings
109 Less Overcharges

NON-OPERATING INCOME

110 Purchase Discount

NON-OPERATING EXPENSES

115 Interest Charges
116 Other Deductions

MISCELLANEOUS

117
118
119

In the original system of the Laundryowners' National Association the operating accounts were arranged in the following groups: prime costs, plant burden, power, collection and delivery expenses, and general expenses. They were followed by non-operating expenses. In the later system the operating accounts carried in the general ledger are analyzed for re-distribution into these groups on a columnar sheet. It is unnecessary to go into further details in regard to the general accounting.

Cost Accounting

During the last seven years cost accounting has been more beneficial to the laundry industry than any other factor. It has established the fact that very generally one of the four main classes of service, which forms no inconsiderable part of the business of almost every laundry, has been performed at a loss. A few laundryowners suspected this fact, but cost accounting proved it. Unfortunately this revelation occurred during the war when costs were mounting, which made it increasingly difficult to get a profitable price for this class of work without at the same time causing an appearance of profiteering. Some laundries went to extremes in their price setting which was in a measure due to some faulty cost figures obtained by analyzing the productive labor into the several

classes of laundry service and distributing all other expenses to these classes in proportion to their respective gross earnings.

To the experienced cost accountant laundry cost accounting presents no really new difficulties. To one who knows little or nothing about cost accounting it is a very veritable labyrinth. The great stumbling block has been the distribution of burden to the various classes of work. In a laundry, as in many manufacturing plants, burden can be equitably applied to the product only through the medium of departments or burden centers.

Four Main Classes of Laundry Service

There are four general classes of laundry service, bundle work, rough dry work, wholesale flat work and wet wash. The original system of the Laundryowners' National Association was designed to show the monthly and cumulative costs of these four classes.

Bundle work was the first class of work done by laundries. It includes shirts, collars, underwear, ladies' wear, and all other wearing apparel. It also includes family flat work. By flat work, whether family or wholesale, is meant the work that is ironed by large roller flat work ironers, such as counterpanes, sheets, table cloths, towels, napkins, etc.

Rough dry work consists of wearing apparel which is washed, starched and dried, but not ironed. Many laundries include family flat work on the rough dry list, completely finish it at the same price per pound as the wearing apparel, and classify it as rough dry.

Wholesale flat work is the flat work which comes to the laundry in large lots from hotels, restaurants, boarding houses, etc.

Wet wash consists, as a rule, of the general family washing which is sent to the laundry to be washed and extracted. It is returned just wet enough for hanging on the family clothes line.

A fifth class of laundry work, called family washing, is now being done by laundries. It is but another and better name for rough dry work, handled, however, by improved methods. This class of work need not be considered in this article.

It is not a serious matter for the average laundry to obtain periodical (12 periods a year) costs on these four general classes. They seldom intermingle in any of the processes of laundering. Each class has its own particular laundry list and comes to the laundry in distinct bundles. After laundering, each class is bundled separately. If the housewife sends three classes of work to be laundered, she must send them in three distinct bundles. After they are laundered each class is returned separately.

Earnings

The earnings of each of the four classes of work should be properly segregated. Most laundries follow this practice.

Labor

In small laundries, where the operatives work in several departments during the day, a weekly time card for each operative is necessary. It is filled in by the worker himself and ok'd by the department head. In some cases department heads rather than the workers fill out time cards. It shows the time by departments and classes of work in both daily and weekly totals. In large laundries, where many of the workers spend the whole week in one department and work on but one class of work, very few time cards are needed. Where time cards are used, the labor distribution is made directly from them to a columnar sheet by departments and classes of work. Where time cards are not used, the labor distribution is made directly from the pay roll. This distribution is controlled, of course, by the productive labor account.

Supplies

The supplies used in laundering, as covered by accounts 52 to 59 already mentioned are issued by the store keeper only upon written requisitions. The requisitions always show the departments which consume the supplies and indicate, when possible, the class of work to which they are to be charged. A large proportion of the supplies cannot be applied directly to any class of work, so they are charged to the respective departments and are re-distributed, each kind upon its own appropriate basis to the classes of work benefited. Bases used for the distribution of supplies are pieces or pounds laundered, productive labor, machine hours, washer loads, or bundles. Estimated figures are used in some cases. After the requisitions have been entered in the stock ledger they are distributed to departments and classes on columnar sheets. These sheets have the same columns and headings as the labor distribution sheets. However, as accounts 52 to 59 show that the supplies have been classified into eight kinds, a separate distribution sheet has to be used for each kind. A distribution sheet contains main columns for each department and subdivision columns for each class of supplies. By using this sheet a charge can be made to a kind of supplies, to a department, and to a class of work, respectively, by making but one entry.

Departments

The departments, or burden centers as they may more appropriately be called, are merely a means to an end. It has proven of great benefit to laundryowners to know the labor spent, the supplies consumed and the burden traceable to each department. Al-

though these data are shown each period, departments were created primarily for another purpose, namely, to equitably apply burden to the various classes of work. In each department the burden is charged to the classes of work either through machine hours, or a percentage of the productive labor. Now if the burden in each department were the same or virtually the same percentage of the productive labor, these departments would be unnecessary even though all of the classes of work were not operated upon in all of the departments, for only one percentage would be required. However, this is not the condition in a laundry. The burden percentages differ materially in each department, ranging from 25 per cent in the marking department up to 200 per cent in the washing department.

Distribution of Burden to Departments

Since some burden accounts are distributed to departments on the basis of floor space, the floor space used by each department must be ascertained. Most launderies are under one roof, so the question as to whether or not the space occupied by one department is worth more per square foot than that occupied by another can be disregarded. It is far more important to determine whether or not each department is correctly located in relation to the processes in other departments than it is to attempt to determine how much more a foot of floor space in one department is worth than in another.

Other burden accounts are distributed on the basis of the relative value of the machinery and equipment in each department. Nearly every laundry has an up-to-date appraisal. Notwithstanding the fact that appraisals made to-day do not reflect cost prices, they are nevertheless a great help in establishing the desired values in the many cases where the values cannot be obtained from the accounting records. There are a few items of equipment which can be traced neither to power nor to a particular department. These should be spread over the departments upon some basis. The bases of distribution for the majority of them are either floor space or productive labor.

The plant burden accounts are distributed to the departments as follows:

Water

The small proportion of water which is used in the lavatories and for drinking purposes could be distributed in proportion to the number of employees in each department, but in most instances this practice is not considered worth while. Therefore all water is charged directly to the washing department. The boiler, to be sure, also uses some water, but it uses none which does not ultimately find its way into the washing department. The exhaust from the engine is used to heat the water used for washing. Live steam, that is the

steam direct from the boiler, is used in the flat work ironers, drying rooms, drying tumblers, presses, etc., but when condensed it is returned to the boiler. Live steam is also used in the washing machines for such washing as has to be boiled.

Gas

Gas heated machines are being rapidly displaced by steam heated ones. Where gas heated machines are in use, the amount of gas used by each department will have to be estimated. This is not a difficult matter.

Machinery and Equipment Repairs

Nearly all machinery and equipment repairs can be traced directly to the departments. Some cost accountants, however, prefer the indirect method of distributing them in proportion to value. It is almost unnecessary to state that the former method should always be chosen.

The other, and more indirect plant burden accounts, with the exception of power, should be distributed as outlined below.

In Proportion to Value of Machinery and Equipment

Depreciation of Machinery and Equipment—Only where a flat rate is used.
Fire Insurance of Machinery and Equipment.
Taxes of Machinery and Equipment.

In Proportion to Floor Space

Rent—If building is really rented.
Building repairs—All that cannot be applied directly.
Building Depreciation.
Fire Insurance—Buildings.
Taxes—Buildings.

In Proportion to Productive Labor

Indirect Labor; Superintendence—In proportion to number of workers.
Liability Insurance—In proportion to wages paid.
Idle Time (if not direct) This account is for idle labor only; Miscellaneous Plant Expense;—Indirect Supplies—In proportion to number of workers.

Power

It is not practicable to distribute the power and steam with more than a fair degree of accuracy. The end would not justify the means. More accurate results might be obtained by making two charges, one for the expenses of the power and steam equipment traceable to each department, the other for the estimated cost of the power and steam used by each department. The latter plan

would be very desirable if it were practicable to determine accurately the steam used by each department, but unfortunately it is not.

The first step to be taken in distributing the power and steam is to determine what proportion of the steam is used by the engines which is usually between 30 and 40 per cent. The engine must then be credited and the washing department debited with the exhaust which is used to heat the washing room water. The net proportion used by the engine is then distributed in proportion to the horse power used. The live steam used for the drying and ironing processes (between 60 and 70 per cent) should be distributed in proportion to the heat units consumed. But as it is virtually impossible to continually ascertain the heat units consumed, one is compelled to use "rule-of-thumb" methods. In some instances the goods are weighed before and after they have been dried and pressed and the steam is distributed in proportion to the weight of water evaporated in each department. In other cases the steam is distributed in proportion to the weight of condensation (hot water) coming from each department. Many of the washing machine loads are boiled by injecting live steam into the washer. By weighing the water and the goods put into a washer both before and after they are boiled the amount of condensation resulting from boiling a load of washing is ascertained. This figure will furnish a rough basis for estimating the steam used in boiling. It must be borne in mind that none of the heat units in this steam are returned to the boiler; whereas, all of the water which is trapped back into the boiler from the other departments still retains a great number of heat units. Having once obtained the estimated proportion of power to be distributed to each department, it is not advisable to make a new estimate until changing conditions make it distinctly necessary.

Departmental Costs and Their Distribution to Classes of Service

The original system of the Laundryowners' National Association for four classes of work was not designed for large laundries. In order, therefore, to avoid even the appearance of unnecessary work, no more departments were created than were needed to insure a reasonable degree of accuracy. These departments were Marking and Sorting, Washing and Extracting, Starching and Drying, Flat Work Ironing, and Hand Ironing. Some protest was made against the use of so many departments. Subsequent events and changed conditions have demonstrated that the fault was one of omission rather than of commission. More departments, not fewer, were needed. To obtain the costs of the four classes of work to-day, the following departments in many instances, are required: Marking, Machine Washing, Hand Washing, Extracting, Starching, Drying Houses, Drying Tumblers, Flat Work Ironing, Dampening and Machine Ironing, Hand Ironing, Miscellaneous Hand Work and Sorting and Wrapping.

Marking

When bundles are received in the laundry, the drivers immediately place them adjacent to or directly in the marking department, where all pieces which bear no mark of identification have one inscribed or affixed. The bundles are opened by the markers who count the pieces and check them against the quantities shown by the lists, mark all pieces which are unmarked or illegibly marked, and classify the pieces for washing by throwing them into the different bins or trucks provided for the purpose. Instead of marking, some laundries pin a numbered safety pin on each piece of rough dry wearing apparel. All bundle and rough dry work have to be either marked or pinned. They are both put through the laundry in lots, there being several lots of each during a day. This is done to prevent confusion in the sorting and wrapping department; and expedites the tracing of missing pieces. Wholesale flat work is not marked, as each customer's work is of sufficient quantity to enable it to be washed separately. It is never interminged, therefore, with other work. As the wet wash washing machine is divided into a number of small pockets, each customer's work is washed in a separate pocket. Therefore, there is very little marking to be done to the wet wash. A marker in a large laundry usually marks one class of work only; whereas, a marker in a small one marks several classes. In the latter case it is not difficult, as a rule, to ascertain the time spent on each class. It is not quite so easy in a small laundry as it is in a large one to trace the marking supplies directly to the several classes of work. The indirect supplies, where there are any, and other burden should be distributed in proportion to productive labor.

Machine Washing

Nearly all of the washing is done by rotary washing machines. The washers, as these machines are called, vary considerably in size. In some laundries every machine is of different capacity. It takes much longer to wash some goods than others. It is seldom that each of the four classes has its own distinct group of washers. Frequently each washer washes several classes of work. A washerman operates several washers at the same time.

There is a choice of at least two ways of distributing the labor and burden to the classes of work. One is to reduce the weights of each class to washer hour pounds (one pound washed one hour) and to distribute them in proportion thereto. This plan involves too much effort and clerical work. The preferable method is to reduce the running time of each washer to a common denominator or unit of measure known as a standard washer hour and to use it as a basis of distribution. Any washer may be chosen as a standard or unit of measure and rated at 100 per cent. All other washers are rated according to their respective capacities. A washer of one-half the capacity of the standard would be rated at 50 per cent; whereas, one of double the standard capacity would be rated at 200

per cent. The running time of a washer is either decreased or increased by its rating. Thus 50 hours of a 50 per cent washer would be figured as 25 hours; whereas, 50 hours of a 200 per cent washer would be figured as 100 hours. Fifty hours of a 100 per cent washer would, of course, remain as 50 hours. It was the original intention to employ the smallest washer as the unit of measure, but in order to save clerical labor a size was chosen of which a laundry had the most. To make possible a uniform standard, it would be well to adopt some particular size as the standard unit of measure, which all laundries would use irrespective of whether or not they had any washers of the size adopted. Time cards are placed on each washer which show the starting and stopping time of each washer load. These washer cards have proven very beneficial in regulating the washing time. It is a common practice among washermen to wash goods much longer than necessary in order to avoid as much as they can the loading and unloading of the washers. The great possibility of waste along this line is obvious.

Some accountants have advocated distributing the labor and burden on the basis of weight, irrespective of the length of time required in washing. This basis cannot be equitable. Bundle work for instance, requires longer washing than wholesale flat work. It is also washed more particularly than any other class. The writer has known collars, of the former class, to be washed for three hours, while counterpanes, of the latter class, were washed but one-half hour. Other accountants have recommended pieces, regardless of their size, as a basis of distribution. Surely this basis is but little more ridiculous than the straight weight one. Plainly it costs more to wash a counterpane than to wash a napkin.

Soap is the largest item of washing supplies. A number of laundries have separate soap tanks for each class; others mark on the washer card the number of pails of soap used for each load and many distribute the soap in proportion to the standard washer hours. As for miscellaneous wash-room supplies, they likewise are applied directly insofar as possible, the indirect portion generally being distributed on the basis of standard washer hours. The standard washer hour basis is not ideal, but it is employed for want of a better one.

Extracting

After being washed the goods are placed in centrifugal extractors which extract the major portion of the water. As these extractors sometimes vary in size, and as some goods take longer to extract than others, it will be necessary, where close costs are desired, to treat the extractors similarly to the washers and distribute the burden on the basis of standard extractor hours. One will not go very far wrong in using extractor loads as a basis of distribution. No supplies are used in extracting.

Hand Washing

The proportion of the goods washed by hand varies in different

laundries. Some do a considerable amount. The greater part of it usually consists of bundle work. Some is extracted by hand wringers and some by the centrifugal extractors. In most instances the labor and supplies will have to be estimated. The burden should be distributed upon the basis of labor.

Starching

Bundle and rough dry are the only two classes of work done in the starching department. In small laundries where the starchers change from one class to another, the labor on each class can be obtained by the use of time cards. A record of the starch used for each class is made in the department. This record must tally with the starch charged to the department. The burden is distributed in proportion to labor.

Drying Houses

Drying houses, as they are called, are small houses within the laundry, heated by steam, and used for certain drying purposes. The majority of them have conveyors upon which the articles are hung to be conveyed around the several loops in the drying house. As a rule, bundle and rough dry work are the only classes of work dried in this manner. Where there are not distinct drying rooms for each class and the workers change from one class to another, time cards will have to be used. No supplies are used in this department. The burden is distributed in proportion to labor.

Tumbler Drying

Such articles as turkish towels, bath mats, certain kinds of underwear, etc., are dried in a cage or cylinder which revolves inside of a steam-heated case. Bundle, rough dry and wholesale flat work pieces are dried in these tumblers. One of the washer cards on which is recorded the class of work being dried and the starting and stopping time of each load is placed on each tumbler. Labor and burden are distributed on the basis of tumbler hours. Weight would be a much better basis of distribution but it is out of the question, in most instances, to weigh every load. When, however, various classes of work are operated upon simultaneously in different compartments of a tumbler, as not infrequently happens, the running time of such a load has to be distributed in proportion to the weight of each class in that load. Owing to this complication arbitrary distributions often have to be made in small laundries.

Flat Work Ironing

The flat work, which embraces three classes, *i.e.*, bundle, rough dry and wholesale flat work, is ironed and as a rule folded, in this department. In the extracting operation the flat work is compressed into hard and tangled masses. Upon reaching the flat work ironing department these matted lumps are placed in a revolving cage known as a breaker where they are broken and the pieces dis-

entangled. The goods then go to workers called shakers who prepare them for the flat work ironing machines by shaking and straightening them. Each of these machines has a crew of at least two feeders and two catchers. The catchers not only take the pieces off the machine but they fold a lot of them as well. A folder placed behind the catchers folds all that the catchers do not fold. When completely folded, each of the three classes of flat work is forwarded directly to its respective sorting and wrapping department. All of the labor in the flat work ironing department, consisting of breakers, shakers, feeders, catchers and folders, is distributed upon the basis of machine hours. The supplies, consisting of machine coverings, etc., and the burden are both prorated to the classes upon the basis of machine hours. Unquestionably nicer results would be obtained if this department were subdivided into three or four burden centers, but it is out of the question except in a few instances.

Dampening and Machine Ironing

In this department the following machines are generally included: Spray dampeners, dampening presses, various shirt ironing presses, collar ironing and finishing machines, small roller ironer (often called a baby mangle), body ironers, sleeve ironers, steam presses, stocking dryers, mending machines, curtain dryers and a few other finishing machines. Generally bundle work only is finished in this department. Sometimes a little rough dry or wholesale flat work is put through this department. In such an event the supplies and burden are distributed in proportion to the labor. Time cards are usually unnecessary unless the workers change from one department to another.

Hand Ironing

The operation of hand ironing needs no description. As bundle work only is hand ironed the labor, supplies and burden are applied directly to that one class of work.

Miscellaneous Hand Work

Some laundries have a special folding department, a blanket drying and combing department or do other hand work. Productive labor is the basis for the distribution of burden applicable to miscellaneous hand work.

Sorting and Wrapping

This is the final department of a laundry unless it has a shipping department. The sorting and wrapping department is subdivided into four distinct physical subdivisions, one for each class of work. If its operatives change from one class of work to another, time cards have to be used. The workers seldom move to other departments except in very small laundries. After the laundry lists have been checked as to quantities by the marking

department, they are sent to the office for pricing and booking. When the office is finished with them, they are transmitted to the sorting department, the lists of each lot being kept separate. A compartment in the sorting rack is reserved for each customer's laundry and his list is attached thereto. Before the goods are wrapped each customer's pieces must check with the pieces shown on the list. As a rule, this sorting is done with great accuracy. The wrapping supplies are charged directly to each class. The burden is distributed in proportion to productive labor.

Shipping Room

The labor in a shipping room should be distributed in proportion to the number of bundles of each class of work handled. The burden should be distributed on the basis of standard washer loads, which is the equivalent of bulk.

Wherever the departmental burden is distributed to the classes of work on the basis of productive labor it is usual to prorate it in proportion to wages paid. It would be a little more correct, however, to use hours of labor instead of wages paid.

Idle Machines

Owing to the fact that the laundry business is strictly a weekly one there is no unfinished work left from Saturday to start work upon on Monday. The machines, therefore, remain idle on Monday until the drivers bring sufficient work to keep them employed. Moreover, as all the work must be ready for delivery not later than Saturday, there is sure to be more or less idle time on Saturday. Furthermore, there are certain machines which are essential to the conduct of the business yet cannot be kept continuously busy throughout the week. For these reasons idle machine time is absorbed in the cost figures in proportion to the running time of machines. If a plant is operating much below normal, idle time is closed into the profit and loss acount. It would be very inaccurate, however, to absorb in the costs all of the idle time of a laundry which was running very much below its capacity.

Collection and Delivery Expense

There is no scientific method of distributing collection and delivery expenses to the various classes of laundry service. But inasmuch as they form such a large proportion of a laundry's expenses the laundryowner naturally wants them distributed as accurately as possible. In different laundries they range from 20 per cent up to 35 per cent of the gross earnings. In the initial installations of the system being discussed, it was decided to use gross earnings as the basis of distribution. This plan was practicable in only a few instances. It was especially unsatisfactory when one or more wagons collected and delivered wholesale flat work exclusively, as that class of work is collected and delivered at a much

lower cost than any of the other classes of work. Some prefer productive labor as a basis of distribution but that method has serious shortcomings too. A bundle of fully finished laundry costs no more to collect and deliver than the same sized bundle would cost if laundered on either the rough dry or wet wash plan. There seems to be no one basis for distributing all of the collection and delivery expenses. More equitable results are undoubtedly obtained by the use of several. Besides, some of these expenses can be applied directly.

Drivers are usually paid a salary plus a commission. Since it takes as long to collect and deliver a small bundle as it does a large one, the salaries are distributed on the basis of delivery calls and the commissions are applied directly. When the salary is merely a nominal one the commissions cannot be selling commissions. Therefore, in such cases both the salary and the commissions are distributed on the basis of delivery calls. Stable expense, garage expense, gasoline, taxes, insurance and licenses are all distributed on the basis of delivery calls. Commissions paid to agents are applied directly. Delivery equipment repairs and delivery equipment depreciation are both distributed on the basis of standard washer loads.

General Expenses

The general expenses consist of executive salaries, office salaries, bad debt allowances, office expense, advertising, free work, stationery and printing and miscellaneous general expenses. In small laundries it is customary to distribute these expenses in proportion to gross earnings. In large laundries, however, it is possible to determine closely the office labor traceable to each of the four classes, apply it directly and distribute the office expenses and the stationery and printing in proportion to the office labor. Some laundries issue laundry lists on requisitions and apply them directly. All other general expenses are distributed in proportion to gross earnings.

Interest Charges

Interest charges are treated as a non-operating expense. This is in accord with sound accounting principles even although none of the interest is absorbed in an inventory.

Cost of Operating the System

The system applicable to the four classes of work having been briefly outlined, the question arises as to how much additional clerical labor is required to operate it in the average laundry.[1] On several occasions in small laundries it has been operated in four

[1]It will be recalled that the cost of securing cost information in an electric cable plant was discussed on page 15 of Volume II, No. 19 of the Official Publications of the National Association of Cost Accountants.

days a month in addition to the time spent on the general accounting. In a large laundry it will require double that time. Its use has seldom entailed the expense of an additional clerk. With the exception of the time cards, stock ledger and requisitions, specially ruled and printed forms are not absolutely required. Columnar books which will answer the purposes can be purchased at many stationery stores.

The Fifteen Class System

The information obtained by using the four class system has been of immeasurable value to the laundry industry. Its startling revelations stimulated demands for further information. Some laundrymen wanted to know whether or not rough dry wearing apparel was costing more per pound than rough dry flat work, for they were charging the same price per pound for both. Others were seeking information as to the difference in cost between wholesale flat work and bundle flat. Many were anxious to learn the costs of shirts, collars, underwear, socks and the various other articles on the bundle work list. Because of the large amount of detail work involved it is not feasible for small laundries to compile this information every month. But nearly accurate article costs have been obtained by using a modification of the special order cost plan. These costs, of course, cannot be absolutely proved; undoubtedly they have not been too high.

In compliance with these demands, the Laundryowners' National Association had devised an amplified system which would furnish monthly costs of fifteen divisions of laundry service. Shirts and collars are usually two of the divisions used, but as they are generally washed separately and always have their own distinct drying and finshing machinery their cost is not difficult to ascertain. The writer believes that the monthly cost of so many classes involved too much work for the average laundry. Moreover, after the cost of fifteen classes have been ascertained, the laundryowner is still unaware of the cost of each different kind of articles which, after all, is the information he most needs. Seven classes will be found to be sufficient in the majority of cases, the three additional classes being shirts, collars and the flat work which comes in both the bundle and the rough dry bundles and is known as family flat. Keeping the costs of fifteen classes of work requires also the keeping of fifteen divisions of the earnings which is quite a task. Furthermore, if the marking and the sorting and wrapping departments are to have their labor distributed accurately, the total number of pieces in each class will have to be ascertained. Moreover, in order to distribute burden properly, more burden centers will be required. All of this work is very practicable in a large laundry, but if attempted in a small one it is safe to say that "rule of thumb" labor distributions will not be the exception but the rule. The writer is fully cognizant of the quality of salesmanship which is required even in a large laundry to induce a proprietor to compile the information requisite to the operation of a fifteen class system.

The marking time cannot be prorated in proportion to the number of either straight pieces or straight pounds marked. It is quite obvious that it requires several times as long to locate the mark on a sheet as on a collar, and no one will contend that ten pounds of handkerchiefs can be marked as rapidly as ten pounds of sheets. The same is true, in a measure, in the sorting operation. The most satisfactory method of applying the marking and sorting labor is to choose some article to use as a common denominator and to reduce the other pieces thereto. For instance, if it requires four times as long to handle a sheet as it does to handle the article selected as the common denominator, a sheet would, therefore, be figured as four pieces.

In both the washing and the extracting operations the hour pound plan might well be used. If the washer hour plan is preferred, each mixed load will have to be weighed and the time of such loads distributed in proportion to the weight of each class in the loads.

Starching time can usually be charged directly.

If the classes chosen are such that they will intermingle in the drying operations, then weight will be the proper basis to use for labor distribution.

The machine ironing and hand ironing time will have to be applied directly. Time cards will have to be used.

As several classes of work are usually delivered in each bundle, none of the collection and delivery expenses can be distributed on the basis of delivery calls. However, these expenses can first be distributed to the four main classes of work and then be re-distributed to the subdivisions of each of the four classes on either the basis of weight or the basis of standard washer loads.

The general expenses, after first being distributed to the four main classes of work should be re-distributed on the basis of pieces.

Article Costs

If intelligent prices are to be made, the cost of laundering each different article must be definitely ascertained. The charge has frequently been made that laundries are profiteering. This charge is as a rule unwarranted. None are so blind as those who will not see. If certain laundryowners continue at hit-or-miss pricing, they have themselves only to blame if the public misjudges them. Customers will be afforded scant satisfaction to know that although the prices charged for some articles are too high these are offset by too low charges for others. Furthermore, the laundry must sell each of its classes of service upon an equitable basis. Whereas the per pound price may be an ideal one for wet wash, it would be a most unjust one for flat work whose small pieces cost very much more per pound to launder than large ones. One accountant in a

large city prepared figures to show that small flat work pieces cost exactly the same price per pound as large ones. Consequently laundries in that city and others began to sell flat work service at a price per pound. Under that plan it was soon discovered that the prices charged for sheets and counterpanes were almost prohibitive. Under such a method it would not be astonishing if some people thought that the laundries were profiteering. Truly, timber and toothpicks are not to be cut at the same price per pound. A laundry recently sent out circulars announcing an offer to launder 15 pounds of goods, of which one-half must be flat work, for the sum of $3. On that basis, a sheet would cost thirty cents and a counterpane sixty. If one-half of the weight were to consist of women's sheer blouses the laundry would reap no gain for its pains. The offer invites us to gamble. That laundry needs article costs.

The main objection raised against article costs is that the total number of pieces of each different kind must be computed each cost period. This task, however, is no greater than the one of segregating both the earnings and the pieces to the extent required by the fifteen class system. Wherever it is necessary to reduce the clerical work to a minimum a four, a five, or a six class system can be used and the article costs of one of each of the classes can be compiled each period or as frequently as possible. In order to obtain article costs it is advisable to use predetermined costs for each operation. At the end of the periods the differences between the actual cost of the several operations and the predetermined costs of the articles which underwent those operations should be distributed to the various articles in proportion to their respective predetermined costs in each operation. By weighing a number of articles of each different kind, the average weight of each of such articles may be learned. These weights will be found very useful in predetermining the washing, extracting and drying costs.

The collection and delivery expenses ought to be distributed on the basis of weight and the general expenses on the basis of pieces.

The laundry industry is as much in need of cost accounting today as it has ever been. The information which it has already obtained has been exceedingly beneficial; much, nevertheless, remains to be done. The writer believes that inconsistent pricing is playing a prominent part in driving laundry back to the home tub. Laundries whose costs are high merely because the plants are not running to capacity have need to learn how much lower their costs would be if those plants were operating at normal capacity. In the majority of cities laundries have not been profiteering as some of their prices might make it appear. The main trouble has been that prices have been based upon suppositions rather than upon determined costs.

APPENDIX

Prepared by the Research Department of the National Association of Cost Accountants

The Laundryowners' National Association was organized in 1883. Certain laundryowners held a special Cost Congress in Chicago in May, 1914, for the purpose of studying the matter of uniform cost accounting. As a result of this meeting the Laundryowners' National Association adopted a uniform system in September, 1914, which contains the present general accounting and cost accounting methods used by the members of this association who have adopted the system.[1] Prior to this time some laundryowners were using uniform acounting methods as early as 1900.

The present system of the Laundryowners' National Association is called Manual of Instructions for the Installation and Operation of the Standardized System of Cost Accounting. It is in the form of a booklet of 30 pages—11 x 9. The system is divided into two parts: the Accounting System and the Cost System. "The Laundryowners' National Association Cost Accounting System is so devised that a laundry, already having the Accounting System and desiring detailed costs, needs only to add those features which relate to the further analysis of the business by departments and by classes of work, thus completing the Cost System."

The primary or accounting system provides for the determining of the cost of operating the business as a whole, and the profit or loss resulting therefrom. The detailed or cost system provides for the determining of the profits or losses on various classes of work, and the cost of laundering individual articles.

The records of the accounting system comprise the following forms and binders: cash—journal, recapitulation forms, analysis forms, general ledger, supply ledger, supply requisitions, voucher forms and balance sheet, profit and loss statements (combined). Sample forms and binders with 22 figures in all are incorporated in this system. The description of these forms is set forth in detail followed by an outline of some general instructions for installing the system.

The names of the asset, liability, revenue and expense accounts and the nature of entries therein are treated. Forty-five model

[1]A paper on "Uniform Methods and Standardized Costs" was read by Burton T. Cooke, Director, Department of Cost Accounting of the Laundryowners' National Association, before the Second International Cost Conference of the National Association of Cost Accountants in Cleveland. This paper together with others presented at the various sessions and the discussions which followed will be reported in full in the year book of the Association.

routine entries showing the manner of recording some common business transactions and adjustments are given. The methods of preparing statements and closing of the books are described. An index to part one is shown.

Part two of the "Manual" referred to above describes "The Detailed Cost System." "The completed Profit and Loss Statement of the Accounting System is the basis of the Detailed or Cost System, which provides, simply stated, for the distribution of the various items and groups of expense as found with the Accounting System to various classes of work."

In the introduction of part two such matters as distribution of expenses to departments, distribution of expenses to classes, idle time and test costs are discussed. Twelve forms and records with figures used in the operation of the cost system are incorporated in the system with a detailed description of each. Some of these forms are: washer record, payroll distribution, distribution of operating expenses to departments and detailed statement of profit and loss.